AMENDMENTS TO THE CLAIMS

1.   (CURRENTLY AMENDED) A method of estimating a pitch of a speech signal, said method comprising:

      dividing the speech signal into segments;

      calculating for each segment a conformity function for the signal;

      detecting peaks in the conformity function;

      <u>responsive to at least three peaks having been detected:</u>

           <u>determining, for each two successive peaks of the at least three detected peaks, of a distance therebetween;</u>

           estimating an average <u>successive-peak</u> distance ~~between said peaks~~; and

           using the estimate of said average <u>successive-peak</u> distance as an estimate of the pitch.

2.   (PREVIOUSLY PRESENTED) The method according to claim 1, further comprising:

      sampling the speech signal to obtain a series of samples; and

      performing said division into segments such that each segment has a fixed number of consecutive samples.

3.   (PREVIOUSLY PRESENTED) The method according to claim 1 further comprising:

      estimating a set of filter parameters using linear predictive analysis (LPA);

      providing a modified signal by filtering the speech signal through a filter based on said estimated set of filter parameters; and

      calculating said conformity function of the modified signal.

4.   (PREVIOUSLY PRESENTED) The method according to claim 1, wherein said conformity function is calculated as an autocorrelation function.

5.   (CURRENTLY AMENDED) The method according to claim 1 further comprising:

      calculating, for each <u>of the at least three peaks,</u> ~~peak in the conformity function~~ the difference between the position of the peak and the estimate of said average <u>successive-peak</u> distance; and

      providing an improved estimate of the pitch by selecting as the improved estimate the position of the peak having the smallest value of said difference.

6.   (PREVIOUSLY PRESENTED) The method according to claim 5 further comprising:

      selecting, if the peak having the smallest value of said difference is represented by a number of samples, the sample having the maximum amplitude of said conformity function as said improved estimate of the pitch.

7.   (PREVIOUSLY PRESENTED) The method according to claim 1, wherein said method is used in a mobile telephone.

8.   (CURRENTLY AMENDED) A device adapted to estimate a pitch of a speech signal, said device comprising:

means for dividing the speech signal into segments;

means for calculating for each segment a conformity function for the signal;

means for detecting peaks in the conformity function;

means for determining, responsive to at least three peaks having been detected, for each two successive peaks of the at least three detected peaks, of a distance therebetween;

means for estimating an average successive-peak distance ~~between said peaks~~; and

means for using the estimate of said average successive-peak distance as an estimate of the pitch.

9.   (PREVIOUSLY PRESENTED) The device according to claim 8 further comprising:

means for sampling the speech signal to obtain a series of samples; and

means for performing said division into segments such that each segment has a fixed number of consecutive samples.

10.   (PREVIOUSLY PRESENTED) The device according to claim 8 further comprising:

means for estimating a set of filter parameters using linear predictive analysis (LPA);

means for providing a modified signal by filtering the speech signal through a filter based on said estimated set of filter parameters; and

means for calculating said conformity function of the modified signal.

11.   (PREVIOUSLY PRESENTED) The device according to claim 8, wherein said conformity function is an autocorrelation function.

12.   (CURRENTLY AMENDED) The device according to claim 8 further comprising:

means for calculating, for each of the at least three peaks, of ~~peak in the conformity function~~ the difference between the position of the peak and the estimate of said average successive-peak distance; and

means for providing an improved estimate of the pitch by selecting as the improved estimate the position of the peak having the smallest value of said difference.

13.   (PREVIOUSLY PRESENTED) The device according to claim 12, wherein the device is further adapted to select, if the peak having the smallest value of said difference is represented by a number of samples, the sample having the maximum amplitude of said conformity function as said improved estimate of the pitch.

14.   (PREVIOUSLY PRESENTED) The device according to claim 8, wherein the device is a mobile telephone.

15.   (PREVIOUSLY PRESENTED) The device according to claim 8, wherein the device is an integrated circuit.